

# Division of Facilities Construction and Management

# MULTI-STEP BIDDING PROCESS FOR CONTRACTORS

# **Request For Solicitation For Construction Services**

**Stage II – Roofing Contractors Bidders List FY08** 

June 8, 2007

# ROOFING IMPROVEMENTS SOCIAL SCIENCE BUILDING

# WEBER STATE UNIVERSITY OGDEN, UTAH

DFCM Project No. 07018810

Richards Bott Architect 620 24th Street Ogden, Utah 84401

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Current copies of the following documents are hereby made part of these contract documents by reference. These documents are available on the DFCM web site at <a href="http://dfcm.utah.gov">http://dfcm.utah.gov</a> or are available upon request from DFCM:

DFCM General Conditions dated May 25, 2005 DFCM Application and Certificate for Payment dated May 25, 2005

Technical Specifications: Drawings:

The Agreement and General Conditions dated May 25, 2005 have been updated from versions that were formally adopted and in use prior to this date. The changes made to the General Conditions are identified in a document entitled Revisions to General Conditions that is available on DFCM's web site at <a href="http://dfcm.utah.gov">http://dfcm.utah.gov</a>

# **INVITATION TO BID**

# ONLY FIRMS PRE-QUALIFIED DURING STAGE I OF THE RFS ARE ALLOWED TO BID ON THIS PROJECT

The State of Utah - Division of Facilities Construction and Management (DFCM) is requesting bids for the construction of the following project:

# ROOFING IMPROVEMENTS - SOCIAL SCIENCE BUILDING WEBER STATE UNIVERSITY - OGDEN, UTAH DFCM PROJECT NO: 07018810

Project Description: Remove existing built up roof system and replace with new fully adhered PVC roof system. Construction Cost Estimate: \$200,000

Company	Contact	Fax
Advanced Systems Construction	Brent Larsen	(801) 763-0108
All Weather Waterproofing, Inc	Delmar Johnson	(801) 467-3961
Capitol Roofing Service	Stewart B. Paulsen	(801) 562-1159
Clark Quality Roofing	Perry Clark	(801) 266-3692
Collins Roofing, Inc.	Douglas Collins	(801) 224-0361
Contract West Roofing, Inc.	Craig Peters	(801) 943-0257
Conwest, Inc.	Phil Scarborough	(815) 550-1136
Dave Atkinson Roofing, Inc	Dave Atkinson	(435) 258-2225
Heritage Roofing, LC	James Smith	(801) 576-8311
Island Heights Construction, Inc.	Terry Cronquist	(435) 753-7452
Kendrick Brothers Roofing, Inc.	Brad L. Kendrick	(801) 731-2020
Nielco Roofing and Sheet Metal, Inc.	Gary Nielson	(801) 263-0485
Redd Roofing Company	Frank Redd	(801) 621-1540
Utah Tile and Roofing, Inc.	Paul Seppi	(801) 266-6836
Utah Western Roofing	Scott Laufenberg	(801) 294-6155

The bid documents will be available at 10:00 AM on Friday, June 8, 2007, and distributed in electronic format only on CDs from DFCM at the Wasatch Building at the Utah State Fairpark, approximately 155 North 1000 West, Salt Lake City, Utah and on the DFCM web page at <a href="http://dfcm.utah.gov">http://dfcm.utah.gov</a>. For questions regarding this project, please contact Darrell Hunting, Project Manager, DFCM, at (801) 538-9617. No others are to be contacted regarding this project. A MANDATORY pre-bid meeting and site visit will be held at 10:00 AM on Wednesday, June 13, 2007, in Room 101 of the Facilities Management Building at Weber State University in Ogden Utah. All pre-qualified prime contractors wishing to bid on this project must attend this meeting.

Bids must be submitted by 2:00 PM on Wednesday, June 20, 2007, at the Wasatch Building at the Utah State Fairpark, approximately 155 North 1000 West, Salt Lake City, Utah. Refer to the map on the DFCM website for directions (<a href="http://dfcm.utah.gov/downloads/fairpark\_map.pdf">http://dfcm.utah.gov/downloads/fairpark\_map.pdf</a>). Bids will be opened and read aloud in the Wasatch Building at the Utah State Fairpark. Note: Bids must be received at the Wasatch Building at the Utah State Fairpark by the specified time. The contractor shall comply with and require all of its subcontractors to comply with the license laws as required by the State of Utah.

A bid bond in the amount of five percent (5%) of the bid amount, made payable to the Division of Facilities Construction and Management on DFCM's bid bond form, shall accompany the bid. The Division of Facilities Construction & Management reserves the right to reject any or all bids or to waive any formality or technicality in any bid in the interest of the State.

DIVISION OF FACILITIES CONSTRUCTION AND MANAGEMENT MARLA WORKMAN, CONTRACT COORDINATOR 4110 State Office Bldg., Salt Lake City, Utah 84114

# STAGE II - MULTI-STEP BIDDING PROCESS

ONLY FIRMS PRE-QUALIFIED DURING STAGE I OF THE RFS ARE ALLOWED TO BID ON THIS PROJECT

# 1. <u>Invitational Bid Procedures</u>

The following is an overview of the invitational bid process. More detailed information is contained throughout the document. Contractors are responsible for reading and complying with all information contained in this document.

<u>Notification:</u> DFCM will notify each registered pre-qualified firm (via fax or e-mail) when a project is ready for Construction Services and invite them to bid on the project.

<u>Description of Work:</u> A description of work or plans/specifications will be given to each contractor. If required, the plans and specifications will be available on the DFCM web page at <a href="http://dfcm.utah.gov">http://dfcm.utah.gov</a> and on CDs from DFCM at the Wasatch Building at the Utah State Fairpark, approximately 155 North 1000 West, Salt Lake City, Utah.

<u>Schedule:</u> The Stage II Schedule shows critical dates including the mandatory pre-bid site meeting (if required), the question and answer period, the bid submittal deadline, the subcontractor list submittal deadline, etc. Contractors are responsible for meeting all deadlines shown on the schedule.

<u>Mandatory Pre-Bid Site Meeting:</u> If a firm fails to attend a pre-bid site meeting labeled "Mandatory" they will not be allowed to bid on the project. At the mandatory meeting, contractors may have an opportunity to inspect the site, receive additional instructions and ask questions about project. The schedule contains information on the date, time, and place of the mandatory pre-bid site meeting.

<u>Written Questions</u>: All questions must be in writing and directed to DFCM's project manager assigned to this project. No others are to be contacted regarding this project. The schedule contains information on the deadline for submitting questions.

Addendum: All clarifications from DFCM will be in writing and issued as an addendum to the RFS. Addenda will be posted on DFCM's web site at <a href="http://dfcm.utah.gov">http://dfcm.utah.gov</a>. Contractors are responsible for obtaining information contained in each addendum from the web site. Addenda issued prior to the submittal deadline shall become part of the bidding process and must be acknowledged on the bid form. Failure to acknowledge addenda may result in disqualification from bidding.

<u>Submitting Bids:</u> Bids must be submitted to DFCM by the deadline indicated on the schedule. Due to the ongoing construction on Capitol Hill and the anticipated shortage of parking during 2007, all bids will be received at the Wasatch Building at the Utah State Fairpark. Refer to map on the DFCM web site for directions (<a href="http://dfcm.utah.gov/downloads/fairpark map.pdf">http://dfcm.utah.gov/downloads/fairpark map.pdf</a>) Bids submitted after the deadline will not be accepted. Bids will be opened by DFCM on the date, time, and place indicated on the schedule.

<u>Subcontractors List:</u> The firm selected for the project must submit a list of all subcontractors by the deadline indicated on the schedule contained in this document.

<u>Pre-qualified List of Contractors:</u> Contractors shall remain on DFCM's list of pre-qualified contractors provided: (a) they maintain a performance rating of 4 or greater on each project, (b) they are not suspended for failure to comply with requirements of their contract, (c) the firm has not undergone a significant reorganization involving the loss of key personnel (site superintendents, project managers, owners, etc.) to a degree such that the firm no longer meets the pre-qualification requirements outlined in Stage I, (d) the financial viability of the firm has not significantly changed, and (e) the firm is not otherwise disqualified by DFCM. Note: If a contractor fails to comply with items (a) through (e) above,

DFCM Form 7a 052107 4

they may be removed from DFCM's list of pre-qualified contractors following an evaluation by a review committee. Contractors will be given the opportunity to address the review committee before a decision is made. Pre-qualified contractors are ONLY authorized to bid on projects within the discipline that they were originally pre-qualified under.

# 2. Drawings and Specifications and Interpretations

Drawings, specifications and other contract documents may be obtained as stated in the Invitation to Bid. If any firm is in doubt as to the meaning or interpretation of any part of the drawings, specifications, scope of work or contract documents, they shall submit, in writing, a request for interpretation to the authorized DFCM representative by the deadline identified in the schedule. Answers to questions and interpretations will be made via addenda issued by DFCM. Neither DFCM or the designer shall be responsible for incorrect information obtained by contractors from sources other than the official drawings/specifications and addenda issued by DFCM.

### 3. Product Approvals

Where reference is made to one or more proprietary products in the contract documents, but restrictive descriptive materials of one or more manufacturer(s) is referred to in the contract documents, the products of other manufacturers will be accepted, provided they equal or exceed the standards set forth in the drawings and specifications and are compatible with the intent and purpose of the design, subject to the written approval of the Designer. Such written approval must occur prior to the deadline established for the last scheduled addendum to be issued. The Designer's written approval will be included as part of the addendum issued by DFCM. If the descriptive material is not restrictive, the products of other manufacturers specified will be accepted without prior approval provided they are compatible with the intent and purpose of the design as determined by the Designer.

# 4. Addenda

All clarifications from DFCM will be in writing and issued as an addendum to the RFS. Addenda will be posted on DFCM's web site at <a href="http://dfcm.utah.gov">http://dfcm.utah.gov</a>. Contractors are responsible for obtaining information contained in each addendum from the web site. Addenda issued prior to the submittal deadline shall become part of the bidding process and must be acknowledged on the bid form. Failure to acknowledge addenda shall result in disqualification from bidding. DFCM shall not be responsible for incorrect information obtained by contractors from sources other than official addenda issued by DFCM.

# 5. Financial Responsibility of Contractors, Subcontractors and Sub-subcontractors

Contractors shall respond promptly to any inquiry in writing by DFCM to any concern of financial responsibility of the Contractor, Subcontractor or Sub-subcontractor. Failure to respond may result in suspension from DFCM's list of pre-qualified contractors.

### 6. Licensure

The Contractor shall comply with and require all of its Subcontractors to comply with the license laws as required by the State of Utah.

# 7. Time is of the Essence

Time is of the essence in regard to all the requirements of the contract documents.

# 8. Bids

Before submitting a bid, each bidder shall carefully examine the contract documents; shall visit the site of the work; shall fully inform themselves as to all existing conditions and limitations; and shall include in the bid the cost of all items required by the contract documents including those added via addenda. If the bidder observes that portions of the contract documents are at variance with applicable laws, building codes, rules, regulations or contain obvious erroneous or uncoordinated information, the bidder shall promptly notify the DFCM Project Manager prior to the bidding deadline. Changes necessary to correct these issues will be made via addenda issued by DFCM.

The bid, bearing original signatures, must be typed or handwritten in ink on the Bid Form provided in the procurement documents and submitted in a sealed envelope at the location specified by the Invitation to Bid prior to the published deadline for the submission of bids.

Bid bond security, in the amount of five percent (5%) of the bid, made payable to the Division of Facilities Construction and Management, shall accompany bid. THE BID BOND MUST BE ON THE BID BOND FORM PROVIDED IN THE PROCUREMENT DOCUMENTS IN ORDER TO BE CONSIDERED AN ACCEPTABLE BID.

If the bid bond security is submitted on a form other than DFCM's required bid bond form, and the bid security meets all other legal requirements, the bidder will be allowed to provide an acceptable bid bond by the close of business on the next business day following notification by DFCM of submission of a defective bid bond security. A cashier's check cannot be used as a substitute for a bid bond.

### 9. Listing of Subcontractors

Listing of Subcontractors shall be as summarized in the "Instructions and Subcontractor's List Form", included as part of the contract documents. The subcontractors list shall be delivered to DFCM or faxed to DFCM at (801)538-3677 within 24 hours of the bid opening. Requirements for listing additional subcontractors will be listed in the contract documents.

DFCM retains the right to audit or take other steps necessary to confirm compliance with requirements for the listing and changing of subcontractors. Any contractor who is found to not be in compliance with these requirements may be suspended from DFCM's list of pre-qualified contractors.

# 10. Contract and Bond

The Contractor's Agreement will be in the form provided in this document. The duration of the contract shall be for the time indicated by the project completion deadline shown on the schedule. The successful bidder, simultaneously with the execution of the Contractor's Agreement, will be required to furnish a performance bond and a payment bond, both bearing original signatures, upon the forms provided in the procurement documents. The performance and payment bonds shall be for an amount equal to one hundred percent (100%) of the Contract Sum and secured from a company that meets the requirements specified in the requisite forms. Any bonding requirements for Subcontractors will be specified in the Supplementary General Conditions.

# 11. Award of Contract

The Contract will be awarded as soon as possible to the lowest, responsive and responsible bidder, based on the lowest combination of base bid and acceptable prioritized alternates, provided the bid is reasonable, is in the interests of DFCM to accept and after applying the Utah Preference Laws in U.C.A. Title 63, Chapter 56. DFCM reserves the right to waive any technicalities or formalities in any bid or in the bidding. Alternates will be accepted on a prioritized basis with Alternate 1 being highest priority, Alternate 2 having second priority, etc. Alternates will be selected in prioritized order up to the construction cost estimate.

# 12. Right to Reject Bids

DFCM reserves the right to reject any or all Bids.

# 13. Withdrawal of Bids

Bids may be withdrawn on written request received from bidders within 24 hours after the bid opening if the contractor has made an error in preparing the bid.

# 14. DFCM Contractor Performance Rating

As a contractor completes each project, DFCM will evaluate project performance based on the enclosed "DFCM Contractor Performance Rating" form. The ratings issued on this project may affect the firm's "pre-qualified" status and their ability to obtain future work with DFCM.



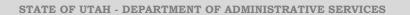


# Division of Facilities Construction and Management

# Stage II PROJECT SCHEDULE

PROJECT NAME: ROOFING IMPROVEMENTS - SOCIAL SCIENCE BUILDING WEBER STATE UNIVERSITY - OGDEN, UTAH				
	7018810		,	
Event	Day	Date	Time	Place
Stage II Bidding Documents Available	Friday	June 8, 2007	10:00 AM	Wasatch Building Utah State Fairpark Approx 155 North 1000 West Salt Lake City, UT **and DFCM web site *
Mandatory Pre-bid Site Meeting	Wednesday	June 13, 2007	10:00 AM	Room 101 Facilities Management Building Weber State University Ogden, UT
Deadline for Submitting Questions	Friday	June 15, 2007	1:00 PM	Darrell Hunting - DFCM E-mail dhunting@utah.gov Fax 801-538-8487
Prime Contractors Turn in Bid and Bid Bond	Wednesday	June 20, 2007	2:00 PM	Wasatch Building Utah State Fairpark Approx 155 North 1000 West Salt Lake City, UT **
Subcontractors List Due	Thursday	June 21, 2007	2:00 PM	DFCM 4110 State Office Building SLC, UT Fax 801-538-3677
Substantial Completion Date	Friday	August 24, 2007	5:00 PM	Project site

- \* NOTE: DFCM's web site address is <a href="http://dfcm.utah.gov">http://dfcm.utah.gov</a>
- \*\* Due to the ongoing construction on Capitol Hill and the anticipated shortage of parking during 2007, all bids will be received and opened at the Wasatch Building at the Utah State Fairpark. Refer to map on the DFCM web site for directions (http://dfcm.utah.gov/downloads/fairpark\_map.pdf)





# **Division of Facilities Construction and Management**

**DFCM** 

# **BID FORM**

NAME OF BIDDER	DATE
To the Division of Facilities Construction and Management	
4110 State Office Building	
Salt Lake City, Utah 84114	
The undersigned, responsive to the "Invitation to Bid" and in accord ROOFING IMPROVEMENTS – SOCIAL SCIENCE BUILDING	
OGDEN, UTAH - DFCM PROJECT NO. 07018810 and having	
of the proposed Work and being familiar with all of the conditions	
Project, including the availability of labor, hereby proposes to furni for the Work in accordance with the Contract Documents as specifi	
stated below. This price is to cover all expenses incurred in perform	
Documents of which this bid is a part:	
I/We acknowledge receipt of the following Addenda:	
For all work shown on the Drawings and described in the Specifical perform for the sum of:	tions and Contract Documents, I/we agree to
	DOLLARS (\$)
(In case of discrepancy, written amount shall govern)	,
I/We guarantee that the Work will be Substantially Complete by <b>Fr</b> successful bidder, and agree to pay liquidated damages in the amou expiration of the Contract Time as stated in Article 3 of the Contract	nt of \$500.00 per day for each day after
This bid shall be good for 45 days after bid opening.	
Enclosed is a 5% bid bond, as required, in the sum of	
The undersigned Contractor's License Number for Utah is	<u> </u>

# BID FORM PAGE NO. 2

Upon receipt of notice of award of this bid, the undersigned agrees to execute the contract within ten (10) days, unless a shorter time is specified in Contract Documents, and deliver acceptable Performance and Payment bonds in the prescribed form in the amount of 100% of the Contract Sum for faithful performance of the contract. The Bid Bond attached, in the amount not less than five percent (5%) of the above bid sum, shall become the property of the Division of Facilities Construction and Management as liquidated damages for delay and additional expense caused thereby in the event that the contract is not executed and/or acceptable 100% Performance and Payment bonds are not delivered within time set forth.

Type of Organization:		
71 0	(Corporation, Partnership, Individual, etc.)	_
Any request and inform	nation related to Utah Preference Laws:	
	Respectfully submitted,	
	Name of Bidder	
	ADDRESS:	
	Authorized Signature	

**BID BOND** (Title 63, Chapter 56, U. C. A. 1953, as Amended)

# KNOW ALL PERSONS BY THESE PRESENTS:

That	hereinafter referred to as the
"Principal," and, with its principal office in the laws of the State of, with its principal office in the this State and U. S. Department of the Treasury Listed, (Circular 570, Comp	, a corporation organized and existing under
this State and H. S. Department of the Treasury Listed (Circular 570, Comp.	anies Holding Certificates of Authority as Acceptable Securities on
Federal Bonds and as Acceptable Reinsuring Companies); hereinafter referre	ed to as the "Surety," are held and firmly bound unto the STATE OF
UTAH, hereinafter referred to as the "Obligee," in the amount of \$the sum of this Bond to which payment the Principal and Surety bind themse	(5% of the accompanying bid), being
the sum of this Bond to which payment the Principal and Surety bind themse	elves, their heirs, executors, administrators, successors and assigns,
jointly and severally, firmly by these presents.	
THE CONDITION OF THIS OBLIGATION IS SUCH that we incorporated by reference herein, dated as shown, to enter into a contract in	hereas the Principal has submitted to Obligee the accompanying bid n writing for the
	Project.
a contract and give bond to be approved by the Obligee for the faithful performed such contract to the principal, then the sum of the amount stated above with a penalty; if the said principal shall execute a contract and give bond to be a ten (10) days after being notified in writing of such contract to the Principal shall execute a contract and give bond to be a ten (10) days after being notified in writing of such contract to the Principal shall defaults and agreed that the liability of the Surety for any and all defaults. The Surety, for value received, hereby stipulates and agrees that obligations from actual date of the bid opening.	Ill be forfeited to the State of Utah as liquidated damages and not as pproved by the Obligee for the faithful performance thereof within cipal, then this obligation shall be null and void. It is expressly of the Principal hereunder shall be the full penal sum of this Bond. of the Surety under this Bond shall be for a term of sixty (60) days
<b>PROVIDED, HOWEVER,</b> that this Bond is executed pursuant to amended, and all liabilities on this Bond shall be determined in accordance herein.	o provisions of Title 63, Chapter 56, Utah Code Annotated, 1953, as with said provisions to same extent as if it were copied at length
<b>IN WITNESS WHEREOF,</b> the above bounden parties have executed below, the name and corporate seal of each corporate party being hereto affix pursuant to authority of its governing body.	cuted this instrument under their several seals on the date indicated ed and these presents duly signed by its undersigned representative,
<b>DATED</b> this day of, 20	·
Principal's name and address (if other than a corporation):	Principal's name and address (if a corporation):
Timespar 5 name and address (if other than a corporation).	Timespar's name and address (if a corporation).
	<del></del>
By:	Ву:
	Title:(Affix Corporate Seal)
Title:	Title:
	(Affix Corporate Seal)
	Surety's name and address:
	Surety's name and address.
STATE OF )	
STATE OF) ss.	Rv.
COUNTY OF)	By:
On this day of, 20, personally appeare whose identity is personally known to me or proved to me on the basis of sat he/she is the Attorney-in-fact of the above-named Surety Company, and tha all respects with the laws of Utah in reference to becoming sole surety upon to me that as Attorney-in-fact executed the same.	t he/she is duly authorized to execute the same and has complied in
Subscribed and sworn to before me this day of	20
Subscribed and sworn to before me this day of My Commission Expires:	, ∠U
Resides at:	
	_
Agoney	NOTARY PUBLIC
Agency:Agent:	
Address:	Approved As To Form: May 25, 2005
Phone:	Ry Alan S Rachman Asst Attorney General





# **Division of Facilities Construction and Management**

# INSTRUCTION AND SUBCONTRACTORS LIST FORM

The three low bidders, as well as all other bidders that desire to be considered, are required by law to submit to DFCM within 24 hours of bid opening a list of <u>ALL</u> first-tier subcontractors, including the subcontractor's name, bid amount and other information required by Building Board Rule and as stated in these Contract Documents, on the following basis:

# PROJECTS UNDER \$500,000 - ALL SUBS \$20,000 OR OVER MUST BE LISTED PROJECTS \$500,000 OR MORE - ALL SUBS \$35,000 OR OVER MUST BE LISTED

- Any additional subcontractors identified in the bid documents shall also be listed.
- The DFCM Director may not consider any bid submitted by a bidder if the bidder fails to submit a subcontractor list meeting the requirements of State law.
- List subcontractors for base bid as well as the impact on the list that the selection of any alternate may have.
- Bidder may not list more than one subcontractor to perform the same work.
- Bidder must list "Self" if performing work itself.

# LICENSURE:

The subcontractor's name, the type of work, the subcontractor's bid amount, and the subcontractor's license number as issued by DOPL, if such license is required under Utah Law, shall be listed. Bidder shall certify that all subcontractors, required to be licensed, are licensed as required by State law. A subcontractor includes a trade contractor or specialty contractor and does not include suppliers who provide <u>only</u> materials, equipment, or supplies to a contractor or subcontractor.

# BIDDER LISTING 'SELF' AS PERFORMING THE WORK:

Any bidder that is properly licensed for the particular work and intends to perform that work itself in lieu of a subcontractor that would otherwise be required to be on the subcontractor list, must insert the term 'Self' for that category on the subcontractor list form. Any listing of 'Self' on the sublist form shall also include the amount allocated for that work.

# **'SPECIAL EXCEPTION'**:

A bidder may list 'Special Exception' in place of a subcontractor when the bidder intends to obtain a subcontractor to perform the work at a later date because the bidder was unable to obtain a qualified or reasonable bid under the provisions of U.C.A.Section 63A-5-208(4). The bidder shall insert the term 'Special Exception' for that category of work, and shall provide documentation with the subcontractor list describing the bidder's efforts to obtain a bid of a qualified subcontractor at a reasonable cost and why the bidder was unable to obtain a qualified subcontractor bid. The Director must find that the bidder complied in good faith with State law requirements for any 'Special Exception' designation, in order for the bid to be considered. If awarded the contract, the Director shall supervise the bidder's efforts to obtain a qualified subcontractor bid. The amount of the awarded contract may not be adjusted to reflect the actual amount of the subcontractor's bid. Any listing of 'Special Exception' on the sublist form shall also include amount allocated for that work.

# INSTRUCTIONS AND SUBCONTRACTORS LIST FORM Page No. 2

# **GROUNDS FOR DISQUALIFICATION:**

The Director may not consider any bid submitted by a bidder if the bidder fails to submit a subcontractor list meeting the requirements of State law. Director may withhold awarding the contract to a particular bidder if one or more of the proposed subcontractors are considered by the Director to be unqualified to do the Work or for such other reason in the best interest of the State of Utah. Notwithstanding any other provision in these instructions, if there is a good faith error on the sublist form, at the sole discretion of the Director, the Director may provide notice to the contractor and the contractor shall have 24 hours to submit the correction to the Director. If such correction is submitted timely, then the sublist requirements shall be considered met.

# CHANGES OF SUBCONTRACTORS SPECIFICALLY IDENTIFIED ON SUBLIST FORM:

Subsequent to twenty-four hours after the bid opening, the contractor may change its listed subcontractors only after receiving written permission from the Director based on complying with all of the following criteria.

- (1) The contractor has established in writing that the change is in the best interest of the State and that the contractor establishes an appropriate reason for the change, which may include, but not is not limited to, the following reasons: the original subcontractor has failed to perform, or is not qualified or capable of performing, and/or the subcontractor has requested in writing to be released.
- (2) The circumstances related to the request for the change do not indicate any bad faith in the original listing of the subcontractors.
- (3) Any requirement set forth by the Director to ensure that the process used to select a new subcontractor does not give rise to bid shopping.
- (4) Any increase in the cost of the subject subcontractor work is borne by the contractor.
- (5) Any decrease in the cost of the subject subcontractor work shall result in a deductive change order being issued for the contract for such decreased amount.
- (6) The Director will give substantial weight to whether the subcontractor has consented in writing to being removed unless the Contractor establishes that the subcontractor is not qualified for the work.

# **EXAMPLE:**

Example of a list where there are only four subcontractors:

TYPE OF WORK	SUBCONTRACTOR, "SELF" OR "SPECIAL EXCEPTION"	SUBCONTRACTOR BID AMOUNT	CONT. LICENSE #
ELECTRICAL	ABCD Electric Inc.	\$350,000.00	123456789000
LANDSCAPING	"Self"	300,000.00	123456789000
CONCRETE (ALTERNATE #1)	XYZ Concrete Inc	298,000.00	987654321000
MECHANICAL	"Special Exception" (attach documentation)	Fixed at: 350,000.00	(TO BE PROVIDED AFTER OBTAINING SUBCONTRACTOR)

PURSUANT TO STATE LAW - SUBCONTRACTOR BID AMOUNTS CONTAINED IN THIS SUBCONTRACTOR LIST SHALL NOT BE DISCLOSED UNTIL THE CONTRACT HAS BEEN AWARDED.



# **Division of Facilities Construction and Management**

**DFCM** 

# SUBCONTRACTORS LIST FAX TO 801-538-3677

aution: You must read and comply fully with instructions.			
TYPE OF WORK	SUBCONTRACTOR, "SELF" OR "SPECIAL EXCEPTION"	SUBCONTRACTOR BID AMOUNT	CONT. LICENS
alternates. We have listed "Self" or "Spec	ctors as required by the instructions, including tial Exception" in accordance with the instructional little licensed as required by State law.		bid as well as a
	FIRM:		
E:			

NOTICE: FAILURE TO SUBMIT THIS FORM, PROPERLY COMPLETED AND SIGNED, AS REQUIRED IN THESE CONTRACT DOCUMENTS, SHALL BE GROUNDS FOR DFCMS REFUSAL TO ENTER INTO A WRITTEN CONTRACT WITH BIDDER. ACTION MAY BE TAKEN AGAINST BIDDERS BID BOND AS DEEMED APPROPRIATE BY DFCM. ATTACH A SECOND PAGE IF NECESSARY.

300/300/	/FVA/	/	//_	
	Project 1	No		

# **CONTRACTOR'S AGREEMENT**

FOR:	
THIS CONTRACTOR'S AGREEMENT, made and entered into this day of, 2 and between the DIVISION OF FACILITIES CONSTRUCTION AND MANAGEMENT, here referred to as "DFCM", and, incorporated in the State of and authorized to do business in the State of Utah, hereinafter referred to as "Cor whose address is	einafter
WITNESSETH: WHEREAS, DFCM intends to have Work performed at	-
WHEREAS, Contractor agrees to perform the Work for the sum stated herein.	
NOW, THEREFORE, DFCM and Contractor for the consideration provided in this Contractor's Agreement, agree as follows:	'S
ARTICLE 1. SCOPE OF WORK. The Work to be performed shall be in accordance with Contract Documents prepared by an ""	
The DFCM General Conditions ("General Conditions") dated May 25, 2005 on file at the office DFCM and available on the DFCM website, are hereby incorporated by reference as part of this Agreement and are included in the specifications for this Project. All terms used in this Contra Agreement shall be as defined in the Contract Documents, and in particular, the General Conditions of the Contract Documents and in particular, the General Conditions of the Contract Documents and in particular, the General Conditions of the Contract Documents and in particular, the General Conditions of the Contract Documents and in particular, the General Conditions of the Contract Documents and the Contract Documents are contracted by the Contract Documents and the Contract Documents are contracted by the Contract Documents and the Contract Documents are contracted by the Contract Documents and the Contract Documents are contracted by the Contract Documents and the Contract Documents are contracted by the Contract Documents and the Contract Documents are contracted by the Contract Documents and the Contract Documents are contracted by the Con	is actor's
The Contractor Agrees to furnish labor, materials and equipment to complete the Work as required. Contract Documents which are hereby incorporated by reference. It is understood and agreed by parties hereto that all Work shall be performed as required in the Contract Documents and shall subject to inspection and approval of DFCM or its authorized representative. The relationship of Contractor to the DFCM hereunder is that of an independent Contractor.	by the 1 be
<b>ARTICLE 2. CONTRACT SUM.</b> The DFCM agrees to pay and the Contractor agrees to act full performance of this Contractor's Agreement, the sum of	ccept in
DOLLARS AND NO CENTS (\$00 is the base bid, and which sum also includes the cost of a 100%	)), which
is the base bid, and which sum also includes the cost of a 100%	

# CONTRACTOR'S AGREEMENT PAGE NO. 2

Performance Bond and a 100% Payment Bond as well as all insurance requirements of the Contractor. Said bonds have already been posted by the Contractor pursuant to State law. The required proof of insurance certificates have been delivered to DFCM in accordance with the General Conditions before the execution of this Contractor's Agreement.

ARTICLE 3. TIME OF COMPLETION AND DELAY REMEDY. The Work shall be
Substantially Complete by Contractor agrees to pay liquidated damages in the
amount of \$ per day for each day after expiration of the Contract Time until the Contractor
achieves Substantial Completion in accordance with the Contract Documents, if Contractor's delay
makes the damages applicable. The provision for liquidated damages is: (a) to compensate the DFCM
for delay only; (b) is provided for herein because actual damages can not be readily ascertained at the
time of execution of this Contractor's Agreement; (c) is not a penalty; and (d) shall not prevent the
DFCM from maintaining Claims for other non-delay damages, such as costs to complete or remedy
defective Work.

No action shall be maintained by the Contractor, including its or Subcontractor or suppliers at any tier, against the DFCM or State of Utah for damages or other claims due to losses attributable to hindrances or delays from any cause whatsoever, including acts and omissions of the DFCM or its officers, employees or agents, except as expressly provided in the General Conditions. The Contractor may receive a written extension of time, signed by the DFCM, in which to complete the Work under this Contractor's Agreement in accordance with the General Conditions.

**ARTICLE 4. CONTRACT DOCUMENTS.** The Contract Documents consist of this Contractor's Agreement, the Conditions of the Contract (DFCM General Conditions, Supplementary and other Conditions), the Drawings, Specifications, Addenda and Modifications. The Contract Documents shall also include the bidding documents, including the Notice to Contractors, Instructions to Bidders/Proposers and the Bid/Proposal, to the extent not in conflict therewith and other documents and oral presentations that are documented as an attachment to the contract.

All such documents are hereby incorporated by reference herein. Any reference in this Contractor's Agreement to certain provisions of the Contract Documents shall in no way be construed as to lessen the importance or applicability of any other provisions of the Contract Documents.

**ARTICLE 5. PAYMENT.** The DFCM agrees to pay the Contractor from time to time as the Work progresses, but not more than once each month after the date of Notice to Proceed, and only upon Certificate of the A/E for Work performed during the preceding calendar month, ninety-five percent (95%) of the value of the labor performed and ninety-five percent (95%) of the value of materials furnished in place or on the site. The Contractor agrees to furnish to the DFCM invoices for materials purchased and on the site but not installed, for which the

# CONTRACTOR'S AGREEMENT PAGE NO. 3

Contractor requests payment and agrees to safeguard and protect such equipment or materials and is responsible for safekeeping thereof and if such be stolen, lost or destroyed, to replace same.

Such evidence of labor performed and materials furnished as the DFCM may reasonably require shall be supplied by the Contractor at the time of request for Certificate of Payment on account. Materials for which payment has been made cannot be removed from the job site without DFCM's written approval. Five percent (5%) of the earned amount shall be retained from each monthly payment. The retainage, including any additional retainage imposed and the release of any retainage, shall be in accordance with UCA 13-8-5 as amended. Contractor shall also comply with the requirements of UCA 13-8-5, including restrictions of retainage regarding subcontractors and the distribution of interest earned on the retention proceeds. The DFCM shall not be responsible for enforcing the Contractor's obligations under State law in fulfilling the retention law requirements with subcontractors at any tier.

**ARTICLE 6. INDEBTEDNESS.** Before final payment is made, the Contractor must submit evidence satisfactory to the DFCM that all payrolls, materials bills, subcontracts at any tier and outstanding indebtedness in connection with the Work have been properly paid. Final Payment will be made after receipt of said evidence, final acceptance of the Work by the DFCM as well as compliance with the applicable provisions of the General Conditions.

Contractor shall respond immediately to any inquiry in writing by DFCM as to any concern of financial responsibility and DFCM reserves the right to request any waivers, releases or bonds from Contractor in regard to any rights of Subcontractors (including suppliers) at any tier or any third parties prior to any payment by DFCM to Contractor.

**ARTICLE 7. ADDITIONAL WORK.** It is understood and agreed by the parties hereto that no money will be paid to the Contractor for additional labor or materials furnished unless a new contract in writing or a Modification hereof in accordance with the General Conditions and the Contract Documents for such additional labor or materials has been executed. The DFCM specifically reserves the right to modify or amend this Contractor's Agreement and the total sum due hereunder either by enlarging or restricting the scope of the Work.

**ARTICLE 8. INSPECTIONS.** The Work shall be inspected for acceptance in accordance with the General Conditions.

**ARTICLE 9. DISPUTES.** Any dispute, PRE or Claim between the parties shall be subject to the provisions of Article 7 of the General Conditions. DFCM reserves all rights to pursue its rights and remedies as provided in the General Conditions.

**ARTICLE 10. TERMINATION, SUSPENSION OR ABANDONMENT.** This Contractor's Agreement may be terminated, suspended or abandoned in accordance with the General Conditions.

# ARTICLE 11. DFCM'S RIGHT TO WITHHOLD CERTAIN AMOUNT AND MAKE USE

**THEREOF.** The DFCM may withhold from payment to the Contractor such amount as, in DFCM's judgment, may be necessary to pay just claims against the Contractor or Subcontractor at any tier for labor and services rendered and materials furnished in and about the Work. The DFCM may apply such withheld amounts for the payment of such claims in DFCM's discretion. In so doing, the DFCM shall be deemed the agent of Contractor and payment so made by the DFCM shall be considered as payment made under this Contractor's Agreement by the DFCM to the Contractor. DFCM shall not be liable to the Contractor for any such payment made in good faith. Such withholdings and payments may be made without prior approval of the Contractor and may be also be prior to any determination as a result of any dispute, PRE, Claim or litigation.

**ARTICLE 12. INDEMNIFICATION.** The Contractor shall comply with the indemnification provisions of the General Conditions.

ARTICLE 13. SUCCESSORS AND ASSIGNMENT OF CONTRACT. The DFCM and Contractor, respectively bind themselves, their partners, successors, assigns and legal representatives to the other party to this Agreement, and to partners, successors, assigns and legal representatives of such other party with respect to all covenants, provisions, rights and responsibilities of this Contractor's Agreement. The Contractor shall not assign this Contractor's Agreement without the prior written consent of the DFCM, nor shall the Contractor assign any moneys due or to become due as well as any rights under this Contractor's Agreement, without prior written consent of the DFCM.

**ARTICLE 14. RELATIONSHIP OF THE PARTIES.** The Contractor accepts the relationship of trust and confidence established by this Contractor's Agreement and covenants with the DFCM to cooperate with the DFCM and A/E and use the Contractor's best skill, efforts and judgment in furthering the interest of the DFCM; to furnish efficient business administration and supervision; to make best efforts to furnish at all times an adequate supply of workers and materials; and to perform the Work in the best and most expeditious and economic manner consistent with the interests of the DFCM.

**ARTICLE 15. AUTHORITY TO EXECUTE AND PERFORM AGREEMENT.** Contractor and DFCM each represent that the execution of this Contractor's Agreement and the performance thereunder is within their respective duly authorized powers.

**ARTICLE 16. ATTORNEY FEES AND COSTS.** Except as otherwise provided in the dispute resolution provisions of the General Conditions, the prevailing party shall be entitled to reasonable attorney fees and costs incurred in any action in the District Court and/or appellate body to enforce this Contractor's Agreement or recover damages or any other action as a result of a breach thereof.

# CONTRACTOR'S AGREEMENT PAGE NO. 5

**IN WITNESS WHEREOF**, the parties hereto have executed this Contractor's Agreement on the day and year stated hereinabove.

	CONTRACTOR:	
	Signature	Date
	Title:	
State of)		
County of)	Please type/print name clearly	
On this day of, 20, personally known to me (or jwho by me duly sworn (or affirmed), did say the firm and that said document was signed by	proved to me on the basis of satisfactory evhat he (she) is the (title	idence) and
(SEAL)	Notary Public  My Commission Expires	
APPROVED AS TO AVAILABILITY OF FUNDS:	DIVISION OF FACILITIES CONSTRUCTION AND MANAG	
David D. Williams, Jr. Date DFCM Administrative Services Director	Manager Capital Development/Improvements	Date
APPROVED AS TO FORM: ATTORNEY GENERAL November 30, 2006	APPROVED FOR EXPENDITURE	
By: Alan S. Bachman Asst Attorney General	Division of Finance	Date

# PERFORMANCE BOND

(Title 63, Chapter 56, U. C. A. 1953, as Amended)

That	hereinafter referre	ed to as the "Principal" and
	, a corporation organized and existing un	der the laws of the State of _
, with its principal office in the City of a Listed (Circular 570, Companies Holding Certificates of Authority as A hereinafter referred to as the "Surety," are held and firmly bound unto the	cceptable Securities on Federal Bonds and as Accepta	ble Reinsuring Companies);
neremarker referred to as the Surety, are need and firmly bound unto the		
said Principal and Surety bind themselves and their heirs, administrators,		
WHEREAS, the Principal has entered into a certain written C construct	ontract with the Obligee, dated the day of	, 20, to
whereas, the Principal has entered into a certain written C construct	, for the approximate sum of	) which
Contract is hereby incorporated by reference herein.	Donais (	
NOW, THEREFORE, the condition of this obligation is such Contract Documents including, but not limited to, the Plans, Specification Contract as said Contract may be subject to Modifications or changes, the	is and conditions thereof, the one year performance wa in this obligation shall be void; otherwise it shall remain	rranty, and the terms of the in full force and effect.
No right of action shall accrue on this bond to or for the use o administrators or successors of the Owner.	f any person or corporation other than the state named h	erein or the heirs, executors,
The parties agree that the dispute provisions provided in the Co	ntract Documents apply and shall constitute the sole disp	ute procedures of the parties.
PROVIDED, HOWEVER, that this Bond is executed pursua and all liabilities on this Bond shall be determined in accordance with said		
IN WITNESS WHEREOF, the said Principal and Surety have	e signed and sealed this instrument this day of _	, 20
WITNESS OR ATTESTATION:	PRINCIPAL:	
	Ву:	
	•	(Seal)
	Title:	
WITNESS OR ATTESTATION:	SURETY:	
	Ву:	
STATE OF)	Attorney-in-Fact	(Seal)
) ss.		
COUNTY OF)		
On this day of, 20, personally appeal identity is personally known to me or proved to me on the basis of satisfar in-fact of the above-named Surety Company and that he/she is duly authoreference to becoming sole surety upon bonds, undertakings and obligations.	ctory evidence, and who, being by me duly sworn, did sa orized to execute the same and has complied in all respe	by that he/she is the Attorney ects with the laws of Utah in
Subscribed and sworn to before me this day of	20	
My commission expires: Resides at:		
resides di.	NOTARY PUBLIC	
Agency:		
Agent:		
Address:Phone:	Approved As By Alan S. Bachmai	To Form: May 25, 2005 n, Asst Attorney General

DFCM Form 7b 052107 20

# PAYMENT BOND

(Title 63, Chapter 56, U. C. A. 1953, as Amended)

# KNOW ALL PERSONS BY THESE PRESENTS:

That		hereinafter referred to as the "Principal," and authorized to do business in this State (Circular 570, Companies Holding Certificates of Authority as Acceptable Securities on Federal Bonds and as			
	, a corporation organized and existing under				
	ppanies); with its principal office in the City of _				
the State of Utah hereinafter	r referred to as the "Obligee," in the amount of _				
Dollars (\$	) for the payment whereof, the said Princip	al and Surety bind themselves and their	r heirs, administrators, executors, successors		
and assigns, jointly and seve	erally, firmly by these presents.				
	e Principal has entered into a certain written Cor				
to construct	, State of Utah, Project No.				
in the County of	, State of Utah, Project No	for the approximate sum o	f		
incorporated by reference he		Donars (\$			
NOW, THEREI	FORE, the condition of this obligation is such th	at if the said Principal shall pay all clair	nants supplying labor or materials to Principa		
	s in compliance with the provisions of Title 63, C				
_	Contract, then, this obligation shall be void; other	=	=		
That said Surety	to this Bond, for value received, hereby stipulate	es and agrees that no changes, extension	as of time, alterations or additions to the terms		
	k to be performed thereunder, or the specification	-			
	e of any such changes, extensions of time, altera				
or drawings and agrees that	they shall become part of the Contract Docume	nts.	·		
PROVIDED H	OWENED 4 41' D 1' 41 A	1	W. I. C. I. A 1 1052		
	<b>OWEVER</b> , that this Bond is executed pursuant to hall be determined in accordance with said prov	-			
	VHEREOF, the said Principal and Surety have				
IN WITHESS V	vine Keof, the said I line par and Surety have	signed and sealed this institution this	uay oi, 20		
WITNESS OR ATTESTA	TION:	PRINCIPAL:			
		By:			
			(Seal)		
		Title:			
WITNESS OR ATTESTA	TION:	SURETY:			
am i mp. o.p.		Ву:			
STATE OF	) ) ss.	Attorney-in-Fact	(Seal)		
COUNTY OF					
COUNTI OF					
On this	day of, 20,	personally appeared before me			
			known to me or proved to me on the basis of		
satisfactory evidence, and w	ho, being by me duly sworn, did say that he/she		=		
authorized to execute the sa	ame and has complied in all respects with the	laws of Utah in reference to becomin	g sole surety upon bonds, undertakings and		
obligations, and that he/she	acknowledged to me that as Attorney-in-fact ex	secuted the same.			
0.1 7.1 1	C 1. 1 C	20			
Subscribed and sworn to be	fore me this day of				
My commission expires:					
-					
		NOTARY PUBLIC			
Agency:					
			Approved As To Form: May 25, 2005		
Address:			Approved As 10 Form: May 25, 2005 By Alan S. Bachman, Asst Attorney General		
Phone:		<u> </u>	J. Man S. Bacillian, Asst Attorney General		

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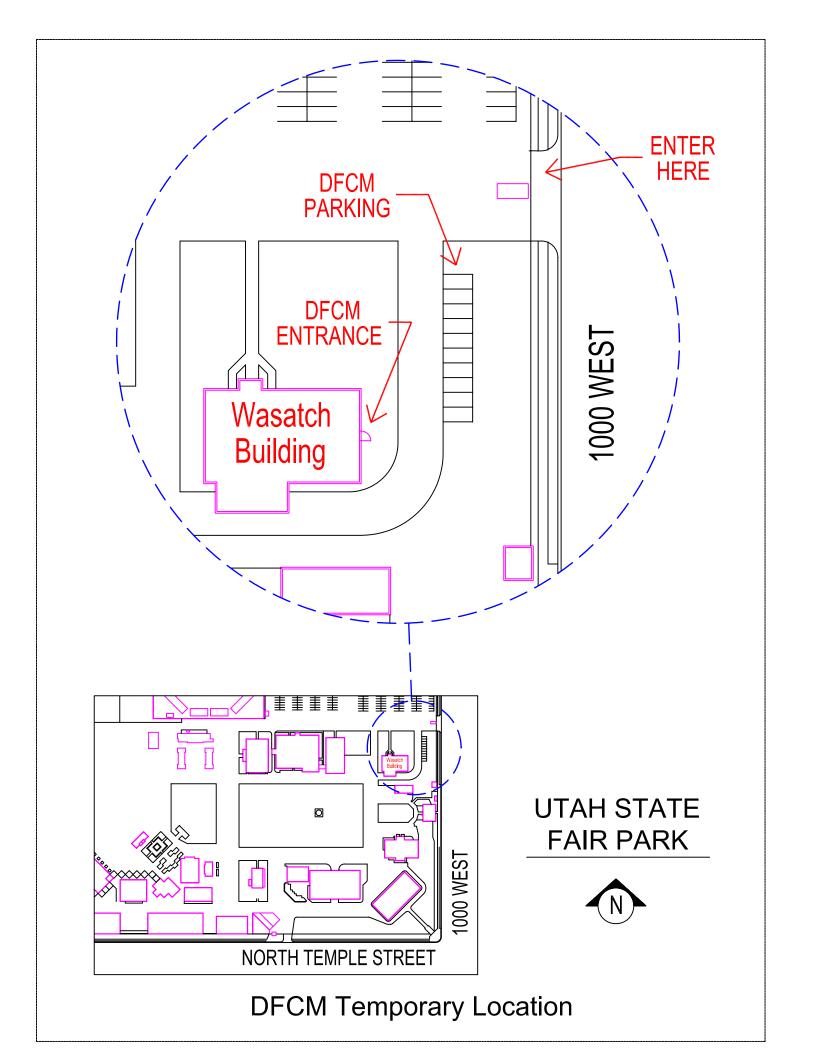
# Division of Facilities Construction and Management

**DFCM** 

# CERTIFICATE OF SUBSTANTIAL COMPLETION

PROJECT	PROJECT NO:			
AGENCY/INSTITUTION				
AREA ACCEPTED				
The Work performed under the subject Condefined in the General Conditions; including Documents, as modified by any change orders area of the Project for the use for which it is	g that the c s agreed to b	construction is sufficiently c	ompleted in accordance with the Contract	
The DFCM - (Owner) accepts the Project opossession of the Project or specified area of				
The DFCM accepts the Project for occupancy utilities and insurance, of the Project subject				
The Owner acknowledges receipt of the followater acknowledges receipt of the followater acknowledges of the followater acknowledges receipt of the followater acknowledges ack		out and transition materials: Warranty Documents	Completion of Training Requirements	
A list of items to be completed or corrected (I responsibility of the Contractor to complete changes thereof. The amount ofcompletion of the punch list work.	all the Wo	ork in accordance with the	Contract Documents, including authorized	
The Contractor shall complete or correct thecalendar days from the above date of isst the Owner has the right to be compensated for expense of the retained project funds. If the Owner shall be promptly reimbursed for the	uance of thi r the delays retained pr	is Certificate. If the list of ite and/or complete the work w oject funds are insufficient t	ems is not completed within the time allotted ith the help of independent contractor at the o cover the delay/completion damages, the	
CONTRACTOR (include name of firm)	_ by:	(Signature)	DATE	
CONTRACTOR (include name of firm)	<b>1</b>	(Signature)	DAIL	
A/E (include name of firm)	_ by:	(Signature)	DATE	
USING INSTITUTION OR AGENCY	_ by:	(Signature)	DATE	
	_ by:			
DFCM (Owner)		(Signature)	DATE	
4110 State Office Building, Salt Lake City, Utelephone 801-538-3018 • facsimile 801-538			cc: Parties Noted DFCM, Director	

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# **SECTION 06100 - ROUGH CARPENTRY**

#### **PART 1 - GENERAL**

# 1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

#### 1.2 SUMMARY

- A. This Section includes the following:
  - 1. Framing with dimension lumber.
  - 2. Rooftop equipment bases and support curbs.
  - 3. Wood blocking, cants, and nailers.

#### 1.3 DEFINITIONS

- A. Rough Carpentry: Carpentry work not specified in other Sections and not exposed, unless otherwise indicated.
- B. Lumber grading agencies, and the abbreviations used to reference them, include the following:
  - 1. WCLIB West Coast Lumber Inspection Bureau.
  - 2. WWPA Western Wood Products Association.

### 1.4 DELIVERY, STORAGE, AND HANDLING

A. Stack lumber, plywood, and other panels; place spacers between each bundle to provide air circulation. Provide for air circulation around stacks and under coverings.

### **PART 2 - PRODUCTS**

#### 2.1 WOOD PRODUCTS, GENERAL

- A. Lumber: DOC PS 20 and applicable rules of lumber grading agencies certified by the American Lumber Standards Committee Board of Review.
  - 1. Factory mark each piece of lumber with grade stamp of grading agency.
  - Where nominal sizes are indicated, provide actual sizes required by DOC PS 20 for moisture content specified. Where actual sizes are indicated, they are minimum dressed sizes for dry lumber.
  - 3. Provide dressed lumber, S4S, unless otherwise indicated.
  - 4. Provide dry lumber with 19 percent maximum moisture content at time of dressing for 2-inch nominal thickness or less, unless otherwise indicated.

#### 2.2 WOOD-PRESERVATIVE-TREATED MATERIALS

- A. Preservative Treatment by Pressure Process: AWPA C2 (lumber) and AWPA C9 (plywood), except that lumber that is not in contact with the ground and is continuously protected from liquid water may be treated according to AWPA C31 with inorganic boron (SBX).
  - 1. Preservative Chemicals: Acceptable to authorities having jurisdiction and one of the following:
    - a. Chromated copper arsenate (CCA).
    - b. Ammoniacal copper zinc arsenate (ACZA).
- B. Kiln-dry material after treatment to a maximum moisture content of 19 percent for lumber. Do not use material that is warped or does not comply with requirements for untreated material.
- C. Mark each treated item with the treatment quality mark of an inspection agency approved by the American Lumber Standards Committee Board of Review.
- D. Application: Treat items indicated on Drawings, and the following:
  - 1. Wood cants, nailers, curbs, equipment support bases, blocking, stripping, and similar members in connection with roofing, flashing, vapor barriers, and waterproofing.
  - 2. Wood sills, sleepers, blocking, furring, stripping, and similar concealed members in contact with masonry or concrete.

#### 2.3 MISCELLANEOUS LUMBER

- A. General: Provide lumber for support or attachment of other construction, including the following:
  - 1. Rooftop equipment bases and support curbs.
  - 2. Blocking.
  - 3. Nailers.
- B. For items of dimension lumber size, provide Standard, Stud, or No. 3 grade lumber with 19] percent maximum moisture content and the following species:
  - Western woods; WCLIB or WWPA.
- C. For concealed boards, provide lumber with 19 percent maximum moisture content and the following species and grades:
  - 1. Western woods, Standard or No. 3 Common] grade; WCLIB or WWPA.
- D. For furring strips for installing plywood or hardboard paneling, select boards with no knots capable of producing bent-over nails and damage to paneling.

#### 2.4 FASTENERS

- A. General: Provide fasteners of size and type indicated that comply with requirements specified in this Article for material and manufacture.
  - Where rough carpentry is exposed to weather, in ground contact, or in area of high relative humidity, provide fasteners with hot-dip zinc coating complying with ASTM A 153/A 153M.
- B. Nails, Brads, and Staples: ASTM F 1667.
- C. Power-Driven Fasteners: CABO NER-272.
- D. Wood Screws: ASME B18.6.1.
- E. Screws for Fastening to Cold-Formed Metal Framing: ASTM C 954, except with wafer heads and reamer wings, length as recommended by screw manufacturer for material being fastened.
- F. Lag Bolts: ASME B18.2.1.
- G. Bolts: Steel bolts complying with ASTM A 307, Grade A; with ASTM A 563 hex nuts and, where indicated, flat washers.
- H. Expansion Anchors: Anchor bolt and sleeve assembly of material indicated below with capability to sustain, without failure, a load equal to 6 times the load imposed when installed in unit masonry assemblies and equal to 4 times the load imposed when installed in concrete as determined by testing per ASTM E 488 conducted by a qualified independent testing and inspecting agency.
  - Material: Carbon-steel components, zinc plated to comply with ASTM B 633, Class Fe/Zn 5.

#### **PART 3 - EXECUTION**

# 3.1 INSTALLATION, GENERAL

- A. Set rough carpentry to required levels and lines, with members plumb, true to line, cut, and fitted. Fit rough carpentry to other construction; scribe and cope as needed for accurate fit. Locate furring, nailers, blocking, and similar supports to comply with requirements for attaching other construction.
- B. Do not use materials with defects that impair quality of rough carpentry or pieces that are too small to use with minimum number of joints or optimum joint arrangement.
- C. Apply field treatment complying with AWPA M4 to cut surfaces of preservative-treated lumber and plywood.
- D. Securely attach rough carpentry work to substrate by anchoring and fastening as indicated, complying with the following:
  - 1. CABO NER-272 for power-driven fasteners.
  - 2. Published requirements of metal framing anchor manufacturer.
  - 3. Table 23-II-B-1, "Nailing Schedule," and Table 23-II-B-2, "Wood Structural Panel Roof Sheathing Nailing Schedule," in the Uniform Building Code.

- E. Use common wire nails, unless otherwise indicated. Select fasteners of size that will not fully penetrate members where opposite side will be exposed to view or will receive finish materials. Make tight connections between members. Install fasteners without splitting wood; predrill as required.
- F. Use finishing nails for exposed work, unless otherwise indicated. Countersink nail heads and fill holes with wood filler.

### 3.2 WOOD FRAMING INSTALLATION, GENERAL

A. Framing Standard: Comply with AFPA's "Manual for Wood Frame Construction," unless otherwise indicated.

**END OF SECTION 06100** 

# **SECTION 07531 - SINGLE PLY MEMBRANE ROOFING**

#### PART 1 - GENERAL

#### 1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

#### 1.2 SUMMARY

- A. This Section includes the following:
  - 1. Adhered felt back membrane roofing
  - 2. Roof insulation
- B. Related Sections Include the following:
  - 1. Division 6 Section "Miscellaneous Carpentry" for wood nailers, curbs, and blocking.
  - 2. Division 7 Section "Sheet Metal Flashing and Trim" for metal roof penetration flashings, flashings, and counterflashings.
  - 3. Division 7 Section "Joint Sealants."

#### 1.3 DEFINITIONS

A. Roofing Terminology: Refer to ASTM D 1079 for definition of terms related to roofing work not otherwise defined in this Section.

# 1.4 PERFORMANCE REQUIREMENTS

- A. General: Install sheet membrane roofing and base flashing that are watertight; will not permit the passage of liquid water; and will withstand wind loads, thermally induced movement, and exposure to weather without failure.
- B. Material Compatibility: Provide roofing materials that are compatible with one another under conditions of service and application required, as demonstrated by roofing system manufacturer based on testing and field experience.
- C. FM Listing: Provide sheet membrane, base flashings, insulation and component materials that meet requirements of FM 4450 and FM 4470 as part of a roofing system and that are listed in FM's "Approval Guide" for Class 1 or noncombustible construction, as applicable. Identify materials with FM markings.
  - 1. Roofing system shall comply with the following:
    - a. Fire/Windstorm Classification: Class 1A-90.

#### 1.5 SUBMITTALS

- A Product Data: For roofing product specified. Include data substantiating that materials comply with requirements.
- B. Installer Certificates: Signed by roofing system manufacturer certifying that Installer is approved, authorized, or licensed by manufacturer to install specified roofing system.
- C. Manufacturer Certificates: Signed by roofing manufacturer certifying that the roofing system complies with requirements specified in the "Performance Requirements" Article. Upon request, submit evidence of meeting requirements.
- D. Product Test Reports: Based on evaluation of tests performed by manufacturer and witnessed by a qualified independent testing agency, indicate compliance of components of roofing system with requirements based on comprehensive testing of current product compositions.
- E. Research/Evaluation Reports: Evidence of roofing system's compliance with building code in effect for Project, from a model code organization acceptable to authorities having jurisdiction.
- F. Maintenance Data: For roofing system to include in the maintenance manuals specified in division 1.
- G. Warranty: Sample copy of standard roofing system manufacturer's warranty stating obligations, remedies, limitations, and exclusions of warranty.
- H. Inspection Report: Copy of roofing system manufacturer's inspection report of completed roofing installation.

#### 1.6 QUALITY ASSURANCE

- A . Installer Qualifications: Engage an experienced installer to perform work of this Section who has specialized in installing roofing similar to that required for this Project and who is approved, authorized, or licensed by the roofing system manufacturer to install manufacturer's product.
- B. Fire-Test-Response Characteristics: Provide roofing materials with the fire-test-response characteristics indicated as determined by testing identical products per test method indicated below by UL, FM or another testing and inspecting agency acceptable to authorities having jurisdiction. Identify materials with appropriate markings of applicable testing and inspecting agency.
  - Exterior Fire-Test Exposure: Class A; ASTM E 108, for application and slopes indicated.
- C. Preliminary Roofing Conference: Before starting roof deck construction, conduct conference at Project site. Meet with the same participants and review the same items listed for the preinstallation conference. In addition, review status of

- submittals and coordination of work related to roof construction. Notify participants at least 5 working days before conference.
- Preinstallation Conference: Before installing roofing system, conduct conference at Project site to comply with requirements of Division 1 Section "Project Meetings".
   Notify participants at least 5 working days before conference.
  - 4. Meet with Owner; Architect; Owner's insurer, if applicable; testing and inspecting agency representative; roofing installer; roofing system manufacturer's representative; deck Installer; and installers whose work interfaces with or affects roofing, including installers or roof accessories and roof mounted equipment.
  - 5. Review methods and procedures elated to roofing installation, including manufacturer's written instructions.
  - 3. Examine deck substrate conditions and finishes for compliance with requirements, including flatness and fastening.
  - 4. Review loading limitations of deck during and after roofing.
  - Review flashings, special roofing details, roof drainage, roof penetrations, equipment curbs, and condition of other construction that will affect roofing.
  - 6. Review governing regulations and requirements for insurance, certificates, and inspection and testing, if applicable.
  - Review temporary protection requirements for roofing system during and after installation.
  - 8. Review roof observation and repair procedures after roofing installation.
  - Document proceedings, including corrective measures or actions required, and furnish copy of record to each participant.

#### 1.7 DELIVERY, STORAGE AND HANDLING

- A. Deliver roofing materials to Project site in original containers with seals unbroken and labeled with manufacturer's name, product brand name and type, date of manufacture, and directions for storing and mixing with other components.
- B. Store liquid materials in their original undamaged containers in a clean, dry, protected location and within the temperature range required by roofing system manufacturer. Protect stored liquid material from direct sunlight.
  - Discard and legally dispose of liquid material that cannot be applied within its stated shelf life.
- C. Protect roof insulation materials from physical damage and from deterioration by sunlight, moisture, soiling and other sources. Store in a dry location. Comply with insulation manufacturer's written instructions for handling, storing and protecting during installation.
- D. Handle and store roofing materials and place equipment in a manner to avoid permanent deflection of deck.

#### 1.8 PROJECT CONDITIONS

A. Weather Limitations: proceed with roofing work only when existing and forecasted weather conditions permit roofing to be installed according to manufacturer's written instructions and warranty requirements.

#### 1.9 INSPECTION SERVICE

A. Manufacturer agrees to re-inspect the completed roof not earlier than 18 nor later than 24 months after completion of the roofing, and if it is determined that there are defects in the roofing, then Manufacturer shall make, or cause to be made at its own expense, such repairs as are necessary to remedy said defects within the scope of its responsibility under the terms of this Warranty.

#### 1.10 WARRANTY

- A. General Warranty: The warranties specified in this Article shall not deprive the Owner of other rights the Owner may have under other provisions of the Contract documents and shall be in addition to, and run concurrent with, other warranties made by the Contractor under requirements of the Contract Documents.
- B. Standard Roofing Manufacturer's Warranty: Submit a written warranty, no dollar limit, signed by roofing system manufacturer agreeing to promptly repair leaks (or to replace all or portions of the roof) resulting from defects in materials or workmanship for the following warranty period:
  - Warranty Period: 20 years from date of Substantial Completion.
- C. Special Project Warranty: Submit roofing Installer's warranty, signed by Installer, covering Work of this Section, including membrane roofing, sheet flashing, roof insulation, fasteners, and vapor retarders, if any, for the following warranty period:
  - 1. Warranty Period: 5 years from date of Substantial Completion.

# **PART 2 - PRODUCTS**

#### 2.1 MANUFACTURER'S REQUIREMENTS

- A. Manufacturer must be listed in NRCA's low slope roofing materials guide.
- B. Manufacturer must have a 10-year successful history as a roofing manufacturer.
- C. Manufacturer must show documented proof of how they plan to meet Warranty obligations. Must be provided in Contractor's Submittal Package.
- D. Manufacturers must agree to and be willing to sign the appropriate State of Utah (DFCM) Manufacturers Warranty for the roof system. The DFCM Warranty, not the Manufacturers Standard Warranty, will be required at project completion.

- E. Manufacturer must have a Certified Installer/Contractor Program. This program must include continuing education for the Contractor.
- F. Contractor must submit a Pre-installation Notice from Manufacturer prior to start of any work. This will include confirmation that the membrane and all accessories being used meet requirements of specification. This will also include confirmation that the Scope of Work is in accordance with published technical data as per manufacturer. This also includes confirmation that a warranty has been requested and will be issued on the DFCM Manufacturer Warranty form at the completion of roofing. This document must be included in Contractor's Submittal Package.
- G. Manufacturer will provide at no additional cost to Owner, start up meeting, progress inspections and finally warranty inspection at project completion by a full time technical representative. Manufacturer require inspections should be listed in specifications. All inspections will be scheduled by Project Architect.
- H. Any portion of specification that does not meet Manufacturer requirements will be installed per manufacturer requirements at no additional cost to Owner. Any portion of the specification that exceeds the Manufacturer's minimum requirements will be installed according to specifications no Manufacturer minimum requirements.
- I. Manufacturer must have a history of meeting Warranty obligations.
- J. Manufacturer is required to release all inspection reports concerning warranted roof system to the Contractor to submit to Project Architect.

#### 2.2 SHEET

- A. Membrane Requirements:
  - 1. Membrane must be Energy Star Rated.
  - 2. Only sheets with stable or low-migrating plasticizers will be acceptable.
  - 3. 10-year minimum performance history on membrane. Minor formulation changes are acceptable as long as the membrane has a successful history.
  - 4. Membrane must be manufactured with low-wicking scrim.
  - 5. Only balanced sheets will be acceptable. Scrim must be near center of membrane with no less than 20 mils polymer above scrim.
  - 6. Thickness: 60 mil (57 mil minimum) polymer thickness not over all thickness. Polymer should be measured between scrim.
  - Must meet or exceed ASTM D 4434 for linear dimensional change and for heat aging.
  - 8. Must meet or exceed ASTM D 5635 for dynamic impact resistance.
  - 9. Must meet or exceed ASTM D 2136 for low temperature flexibility.
  - 10. Exposed Face Color: White.
  - 11. Membrane shall conform to ASTM D4434-96 (or latest revision), "Standard for Polyvinyl Chloride Sheet Roofing". Classification: Type II, Grade I.
  - 12. Backing: Fleece backed.

## 2.3 AUXILIARY MATERIALS

A General: Furnish auxiliary materials recommended by roofing system manufacturer for intended use and compatible with membrane roofing.

- 1. Furnish liquid-type auxiliary materials that meet VOC limits of authorities having jurisdiction.
- B. Fasteners: Factory-coated steel fasteners and metal or plastic plates meeting corrosion-resistance provisions of FM 4470, designed for fastening sheet to substrate, and acceptable to roofing system manufacturer.
- C. Miscellaneous Accessories: provide pourable sealers, preformed cone and vent sheet flashings, preformed inside and outside corner sheet flashings, T-joint covers, inseam sealants, termination reglets, and other accessories recommended by roofing system manufacturer for intended use.

#### 2.4 INSULATION/OVERLAYMENT/RECOVER BOARD

A. Insulation - Polyisocyanurate Insulation

#### 2.5 INSULATION ACCESSORIES

- A. General: Furnish roof insulation accessories recommended by insulation manufacturer for intended use and compatible with sheet roofing material.
- B. Fasteners: Factory-coated steel fasteners and metal or plastic plates meeting corrosion-resistance provisions of FM 4470, designed for fastening roof insulation to substrate, and acceptable to roofing system manufacturer.

#### 2.6 DRIP EDGE / FASCIA

A. A PVC coated heat-weldable sheet metal capable of being formed into a variety of shapes and profiles. 25 gauge, G90 galvanized metal sheet with a 20 mil unsupported membrane laminated on one side.

## **PART 3 - EXECUTION**

#### 3.1 APPROVED INSTALLERS

- A. Contractor must have Five (5) years experience as a Roofing Contractor.
- B. Contractor must have Five (5) years experience with the specified product.
- C. Contractor must be a Manufacturer Certified Installer of roofing system to be installed.
- D. Contractor must document continuing education for the foreman that will daily oversee the work on the roofing system. A minimum of 12 hours per year is required.
- E. On site foreman must be able to clearly communicate with building Owner/Occupants.

F. Contractor will provide a 24 hour emergency phone number to Project Manager and agency contact person.

#### 3.2 EXAMINATION

- A. Examine substrates, areas, and conditions under which roofing will be applied, with Installer present, for compliance with requirements.
- B. Verify that roof openings and penetrations are in place and set and braced and that roof drains are properly clamped into position.
- C. Verify that wood nailers are in place and secured and match thicknesses of insulation required.

### 3.3 PREPARATION

- A. Clean substrate of duct, debris, and other substances detrimental to roofing installation according to roofing system manufacturer's written instructions. Remove sharp projections.
- B. Prevent materials from entering and clogging roof drains and conductors and from spilling or migrating onto surfaces of other construction. Remove roof-drain plugs when no work is taking place or when rain is forecast.
- C. Complete terminations and base flashings and provide temporary seals to prevent water from entering completed sections of the roofing system at the end of the workday or when rain is forecast. Remove and discard temporary seals before beginning work on adjoining roofing.
- D. Structural Concrete Deck
  - The roof deck shall be installed and cured in accordance with industry standards. The surface shall have a smooth and level finish and shall be free of dust, excess moisture, oil-based curing agents and loose debris. Sharp ridges or other projections above the surface shall be removed before roofing. An insulation recover board is required as a substrate to adhere to.

#### 3.4 INSULATION INSTALLATION

- A. Insulation shall be installed according to insulation manufacturer's insturctions.
- B. Insulation shall be neatly cut to fit around penetrations and projections.
- C. Install tapered insulation in accordance with insulation manufacturer's shop drawings.
- D. Install tapered insulation around drains creating a drain sump.
- E. Do not install more insulation board than can be covered with membrane by the end of the day or the onset of inclement weather.

F. Fully adhere to deck with low-rise foam.

#### 3.5 FULLY ADHERED SHEET INSTALLATION

- A. Install sheet over area to receive roofing according to roofing system manufacturer's written instructions. Unroll sheet and allow to relax for a minimum of 30 minutes.
- B. Start installation of sheet in presence of roofing system manufacturer's technical personnel.
- C. Accurately align sheets and maintain uniform side and end laps of minimum dimensions required by manufacturer. Stagger end laps.

#### 3.6 SEAM INSTALLATION

A. Heat-weld seams according to roofing system manufacturer's requirements.

#### 3.7 FLASHING INSTALLATION

- A. Install sheet flashings and preformed flashing accessories and adhere to substrates according to roofing system manufacturer's written instructions.
- B. Apply bonding adhesive to substrate and underside of flashing sheet as required rate and allow to partially dry. Do not apply bonding adhesive to seam area of flashing.
- C. Flash penetrations and field-formed inside and outside corners with cured or uncured sheet flashing as recommended by manufacturer.
- D. Terminate and seal top of sheet flashings and mechanically anchor to substrated.

## 3.8 FIELD QUALITY CONTROL

- A. Final Roof inspection: Arrange for roofing system manufacturer's technical personnel to inspect roofing installation on completion and submit report to Architect.
  - Notify Architect or Owner 48 hours in advance of the date and time of inspection.

#### 3.9 PROTECTING AND CLEANING

- A. Protect sheet membrane roofing from damage and wear during remainder of construction period. When remaining construction will not affect or endanger roofing, inspect roofing or deterioration and damage, describing its nature and extent in a written report, with copies to Architect and Owner.
- B. Correct deficiencies in or remove roofing that does not comply with requirements, repair substrates, reinstall roofing, and repair sheet flashings to a condition free of

damage and deterioration at the time of Substantial Completion and according to warranty requirements.

# **END OF SECTION 07531**

#### **SECTION 07600 - FLASHING AND SHEET METAL**

#### **PART 1 - GENERAL**

## 1.1\_SUMMARY

- A. Section Includes:
  - Sheet metal flashing and trim.
  - 2. Fasteners and attachment devices.
  - 3. Coatings and slip sheets to isolate dissimilar materials.
  - 4. Parapet Caps

#### 1.2 SUBMITTALS

- A. Product Data.
- B. Samples: Submit 6-inch-square samples of each type of metal and finish required.

#### **PART 2 - PRODUCTS**

#### 2.1 MATERIALS

- A. Galvanized Steel Sheet: ASTM A 526, commercial quality, G90 hot-dip galvanized.
- B. Aluminum Sheet: ASTM B 209, Type 3003 H14.
- C. Sheet Lead: Hard tempered, containing 4 to 6 percent antimony, 3.0 pounds per square foot minimum weight for exposed sheet. Soft lead sheet, 4.0 pounds per square foot minimum weight for concealed uses.
- D. Pre-finished Metal: 24 Ga. steel, polyvinyledene fluoride resin-base finish (Kynar 500 or Hylar 5000) for coil-coating components. Color as selected by Architect.

#### 2.2 ACCESSORY MATERIALS

- A. Fasteners: Corrosion-resistant metal of same material as the material being fastened, or other material recommended by sheet metal manufacturer. Match finish and color of exposed fastener heads to finish and color of sheet material being fastened.
- B. Joint Adhesive: Two-component noncorrosive epoxy adhesive, recommended by metal manufacturer for sealing of nonmoving joints.
- C. Bituminous Coating: Heavy bodied, sulfur-free, asphalt-based paint; FS TT-C-494.

#### 2.3 PREFORMED REGLET FLASHING SYSTEMS

A. General: Fabricate reglet flashing system from 24 gage galvanized steel sheet formed to provide secure interlocking of separate reglet and counterflashing pieces.

- B. Types Required:
  - Surface-mounted type: Provide with slotted holes for fastening to substrate, with neoprene or other suitable weatherproofing washers, and with channel for sealant at top edge.

#### 2.4 FABRICATION - GENERAL

- A. Fabricate sheet metal using sheet metal thicknesses indicated on the drawings or schedules.
- B. Form sheet metal to match profiles indicated, substantially free from oil-canning, fish-mouths, and other defects.
- C. Comply with SMACNA "Architectural Sheet Metal Manual" for applications indicated.
- D. Provide for thermal expansion of exposed sheet metal work exceeding 15 feet running length.
  - 1. Flashing and trim: Provide movement joints at maximum spacing of 10 feet; no joints allowed within 2 feet of corner or intersection.
- E. Conceal fasteners and expansion provisions wherever possible.
  - 1. Exposed fasteners are not allowed on faces of sheet metal exposed to public view.
- F. Fabricate cleats and attachment devices from same material as sheet metal component being anchored or from compatible, noncorrosive metal recommended by sheet metal manufacturer.
  - Gage: As recommended by SMACNA or metal manufacturer for application, but in no case less than gage of metal being secured.

#### **PART 3 - EXECUTION**

#### 3.1 PREPARATION

A. Isolate dissimilar metals by means of a heavy bituminous coating, approved paint coating, adhered polyethylene sheet, or other means approved by the architect.

#### 3.2 INSTALLATION

- A. General: Except as indicated otherwise, comply with sheet metal manufacturer's installation instructions and recommendations in the SMACNA "Architectural Sheet Metal Manual."
- B. Roof Edge Flashings: Secure metal flashings at roof edges to comply with Factory Mutual Loss Prevention Data 1-49 for Zone 1 wind exposure.
- C. Counterflashings: Coordinate installation of counterflashings with installation of assemblies to be protected by counterflashing. Install counterflashings in reglet or receiver of other sheet metal fabrication. Secure in a waterproof manner by means of snap-in installation and sealant, lead wedges and sealant, interlocking folded seam, or blind rivets and sealant. Lap counterflashing joints a minimum of 2 inches and bed with sealant.

#### 3.3 CLEANING AND PROTECTION

- A. Repair or replace work which is damaged or defaced, as directed by the architect.
- B. Remove from sheet metal surfaces any debris or substances which will inhibit uniform weathering.
- C. Protect sheet metal work as recommended by the installer so that completed work will be clean, secured, and without damage at substantial completion.

**END OF SECTION 07600** 

#### **SECTION 07920 - JOINT SEALANTS**

#### **PART 1 - GENERAL**

#### 1.1 SUMMARY

- A. Section Includes:
  - The sealing of joints indicated on schedule at the end of this section.
  - 2. The sealing of other joints indicated on drawings.

#### 1.2 DEFINITIONS

- A. Substrates:
  - 1. M-type substrates: Concrete, concrete masonry units, brick, mortar, natural stone. The term "masonry" means brick, stone, and concrete masonry work.
  - 2. G-type substrates: Glass and transparent plastic glazing sheets.
  - 3. A-type substrates: Metals, porcelain, glazed tile, and smooth plastics.
  - 4. O-type substrates: Wood, unglazed tile; substrates not included under other categories.

#### 1.3 SUBMITTALS

- A. Product data.
- B. Samples for Color Selection. (Products exposed to view only.)

#### 1.4 PROJECT CONDITIONS

- A. Environmental Limitations: Do not install sealers if any of the following conditions exist:
  - 1. Air or substrate temperature exceeds the range recommended by sealer manufacturers.
  - 2. Substrate is wet, damp, or covered with snow, ice, or frost.
- B. Dimensional Limitations: Do not install sealers if joint dimensions are less than or greater than that recommended by sealer manufacturer; notify the architect and get sealer manufacturer's recommendations for alternative procedures.

#### **PART 2 - PRODUCTS**

#### 2.1 MATERIALS - GENERAL

- A. General: Provide only products which are recommended and approved by their manufacturer for the specific use to which they are put and which comply with all requirements of the contract documents.
  - 1. Provide only materials which are compatible with each other and with joint substrates.
  - 2. Colors of exposed sealers: As selected by the architect from manufacturer's standard colors.

#### 2.2 ELASTOMERIC SEALANTS

A. Elastomeric Sealants - General: Chemically curing elastomeric sealants of types indicated, complying with ASTM C 920, including specific Type, Grade, Class, and Uses indicated, as well as all other requirements specified.

- Where movement capability exceeding that measured by ASTM C 920 is specified, sealant shall withstand the total movement indicated while remaining in compliance with the other requirements specified, when tested in accord with ASTM C 719, with base joint width measured at the time of application.
- 2. For M-type substrates: Comply with requirements for Use M.
- 3. For A-type substrates: Comply with requirements for Use A.
- 4. For O-type substrates: Comply with requirements for Use M (minimum) and Use O for the particular substrate.
- B. Two-Part Nonsag Polysulfide Sealant: Type M, Grade NS, Class 12-1/2, Use NT.
- C. Silicone Sealant: One-part, non-acid curing, Type M, Grade NS, Class 25, USENT, Use M, plus movement capability of 50 percent in both extension and compression.
- D. All-Purpose Urethane Sealant: Multipart, nonsag, Type M, Grade NS, Class 25, Uses NT, M, G and A.

#### 2.3 SEALANT BACKERS

A. Backers - General: Nonstaining; recommended or approved by sealant manufacturer for specific use.

#### **PART 3 - EXECUTION**

#### 3.1 CONDITIONS

A. Do not begin joint sealer work until unsatisfactory conditions have been corrected.

#### 3.2 PREPARATION

A. Masking Tape: Use masking tape to keep primers and sealers off of adjacent surfaces which would be damaged by contact or by cleanup. Remove tape as soon as practical.

#### 3.3 INSTALLATION

A. Comply with sealer manufacturers' installation instructions and recommendations, except where more restrictive requirements are specified.

#### 3.4 SCHEDULE OF JOINT SEALERS

- A. Exterior Joints:
  - 1. Use one of the following sealants:
    - a. High movement silicone sealant.
  - 2. Backer: Backer rod.

#### **END OF SECTION 07900**

Bob Anderson State of Utah DFCM 4130 State Office Bldg Salt Lake City, UT 84114

Ref: Batch # 73198, Lab # DFC1190 - DFC1191

Received February 22, 2007

Test report

Weber State University - Social Science Building

Sampled by Bob Anderson, 2/8/07

Dear Mr. Anderson:

Samples DFC1190 through DFC1191 have been analyzed by visual estimation based on EPA-600/M4-82-020 December 1982 optical microscopy test method. Appendix "A" contains statements which an accredited laboratory must make to meet the requirements of accrediting agencies. It also contains additional information about the method of analysis. Appendix "A" must be included as an essential part of this test report.

This report may be reproduced but all reproduction must be in full unless written approval is received from the laboratory for partial reproduction. The results of analysis are as follows:

## <u>Lab DFC1190</u>, Field SS-001 10:00 - Asphalt roofing material - Roof sample

This sample contains four types of material: The first type is black tar layers; the second type is 10% fiberglass in black tar layers; the third type is 40% plant fiber in black tar felt layers; the fourth type is perlite and 40% plant fiber in brown insulation. This sample is non-homogeneous.

#### Asbestos is none detected.

The first type is 55% of the sample. The second type is 20% of the sample. The third type is 15% of the sample. The fourth type is 10% of the sample.

## <u>Lab DFC1191, Field SS-002</u> 10:10 - Asphalt roofing material - Flashing sample

This sample contains two types of material: The first type is **10% chrysotile asbestos** in black tar with limestone; the second type is 10% fiberglass in black tar. This sample is non-homogeneous.

The first type is 20% of the sample. The second type is 80% of the sample.

Batch # 73198 Lab # DFC1190 - DFC1191 Page 2 of 2

In order to be sure reagents and tools used for analysis are not contaminated with asbestos, blanks are tested. Asbestos was none detected in the blanks tested with this bulk sample set.

Very truly yours,

Steve H. Dixon, President

Analyst: Steve H. Dixon\_\_\_\_\_\_ Date Analyzed: 02/27/07



## **Division of Facilities Construction and Management**

## CONTRACTOR ROOFING WARRANTY

WHEREAS	
Of (Address)	(Phone)
Herein called the "Roofing Contract ("work") on the following project:	tor", has performed roofing and associated
Owner:State of Utah	
Agency:	
Name of Building:	DFCM Project Number
Address:	
Area of Work:	Date of Acceptance:
Warranty Period: Five_(5) years	Date of Expiration:

AND WHEREAS Roofing Contractor has contracted (either directly with Owner or indirectly as a subcontractor) to warrant said work against leaks and faulty or defective materials and workmanship for designated Warranty Period.

NOW THEREFORE Roofing Contractor herby warrants, subject to terms and conditions herein set forth, that during Warranty Period he will at his own cost and expense, make or cause to be made such repairs to or replacements of said work as are necessary to correct faulty and defective work, and as are necessary to maintain said work in watertight condition. In addition to making the work watertight, the Roofing Contractor shall remove and/or repair blisters, ridges, flashings, splits and other irregularities which in the opinion of the Roofing Manufacture's technical representative do not conform to acceptable roofing practices and conditions. These repairs shall be made prior to expiration of the five (5) year Warranty Period and to the satisfaction of the Roofing Manufacturer's technical representative.

This Warranty is made subject to the following terms and conditions:

1. Specifically excluded from this Warranty are damages to work and other parts of the building, and to building contents, caused by: a) lightning, windstorm; b) fire; c) failure of roofing system substrate including cracking settlement, excessive deflection, deterioration, and decomposition; d) faulty construction of parapet walls, copings, chimneys, skylights, vents, and equipment supports, not part of contractors work and e) activity on roofing by others including construction contractors, maintenance personnel, other persons, and animals whether authorized or unauthorized by Owner,

When work has been damages by any of foregoing causes, Warranty shall be null and void until such damage has been repaired by Roofing Contractor, and until cost and expense thereof has been paid by Owner or by another responsible party so designated.

- The Roofing Contractor is responsible for damage to work covered by this Warranty, but is not liable for consequential damages to building contents, resulting from leaks or faults or defects of work.
- During Warranty Period, if Owner allows alteration of work by anyone other than Roofing Contractor, including cutting, patching and maintenance in connection with penetrations, attachment of other work, and positioning of anything on roof, this Warranty shall become null and void upon date of said alterations, but only to extent said alterations affect work covered by this Warranty. If Owner engages Roofing Contractor to perform said alterations, Warranty shall not become null and void, unless Roofing Contractor, prior to proceeding with said work, shall claim that said alterations would damage or deteriorate work, thereby reasonably justifying a limitation or termination of this warranty.
- During Warranty Period, if original use of roof is changed and it becomes used for, but was not originally specified for, a promenade, work deck, spray cooled surface, flooded basin, or other use or service more severe than originally specified, this Warranty shall become null and void upon date of said change, but only to extent said change affects work covered by this Warranty.
- The Owner shall promptly notify Roofing Contractor of observed, known or suspected leaks, defect or deterioration, and shall afford reasonable opportunity for Roofing Contractor to inspect work, and to examine evidence of such leaks, defects or deterioration.

This Warranty is recognized to be the only Warranty of Roofing Contractor on said work, and is in addition to the Roofing Warranty furnished by the Roofing Manufacturer, and shall not operate to restrict or cut off Owner from other remedies and resources lawfully available to him in cases of roofing failure. Specifically, this Warranty shall no operate to relieve Roofing. Contractor of responsibility for performance of original work in accordance with requirements of the Contract Documents, regardless of whether Contract was a contract directly with Owner or a subcontract with Owners General Contractor.

day of	•
Cosigned by General Contractor by:	
(General Contractor)	(Roofing Contractor)
(Business Address)	(Business Address)
(Signature)	(Signature)
(Title)	(Title)



# **Division of Facilities Construction and Management**

**DFCM** 

# WARRANTY FOR SINGLE PLY ROOFING

WHERE AS,	(manufacture name), a corporation whose address	s is,
hereinafter called the Manufacturer applied, pursuant to the specification to construct a PVC, TPO, EPDM or	, has manufactured and sold and caused to have ons and inspection, the necessary roofing materials other single ply roof of approximately ted roof flashing of approximately ted roof flashing of approximately	
OWNER: STATE OF UTAH		
DFCM PROJECT NO:		
LOCATION:		
DATE OF ACCEPTANCE OF ROO	FING:	
MANUFACTURE ADDRESS:		
MANUFACTURER'S WARRANTY	NO:	
PHONE NUMBER FOR WARRANT	TY SERVICE:	
ROOFING CONTRACTOR NAME	:	
ROOFING CONTRACTOR ADDRE	ESS:	

AND WHEREAS, by careful examination of said roof by the Manufacturer's representative, it has been determined that roofing materials have been applied in conformance with Manufacturer's specifications.

AND WHEREAS, Manufacturer represents and wishes to warranty, subject to the limits stated herein, that its roofing when so applied is effectively watertight for a period of twenty (20) years despite normal wear and tear by the elements, as well as guaranteeing it against defects in workmanship or materials.

NOW THEREFORE, said Manufacturer warranties to the said Owner that, as set forth below, during a period of twenty (20) years from the date of acceptance of said single-ply roofing described above, Manufacturer will at its own expense, make or cause to be made, any repairs that may be necessary, as a result of defects in workmanship or materials supplied by the Manufacturer which results in leaks or of normal wear and tear by the elements which results in leaks, and will maintain said roof in water tight condition free from all leaks arising from such causes. For purposes of this warranty, damage to the roof caused by any unusual natural phenomena shall not be deemed to be "normal wear and tear by the elements".

**INCLUSIONS:** This Warranty does cover, and Manufacturer shall be liable for the following:

- 1 Roofing membrane, membrane flashings, metal flashings, mechanical fastening system, anchors, adhesives, seaming materials, slip sheets, fabrics, insulations, under payments, and accessories furnished by the Manufacturer as incorporated into the roof membrane system.
- Vapor barriers, insulations and / or materials furnished by the Manufacturer or approved to be incorporated into the roof membrane assembly and such damage as may result from failure of these materials.
- Repair of splits, breaks, cracks, and seam failures in membrane system.
- 4 Leaks from failure in material or workmanship.

**EXCLUSIONS:** This Warranty does not cover, and Manufacturer shall not be liable for the following:

- Metal work, including metal counter flashings, not a part of the roof membrane system and such damage as may result from application of these materials;
- Any damage to the roof caused by structural defect in, or failure of, the building or defects in, or failure of, any structural roof deck, or other sheathing materials, used as the base over which the roof and roof insulation is applied;
- 3 Roof damage from special chemical conditions not disclosed to Manufacturer;
- Any damage to the building or contents thereof, except replacement of damaged roof insulation and vapor barrier as noted under "INCLUSION" above;
- 5 Damage due to unauthorized alterations to roofing system.

- Damage to the roof due to mechanical abrasion or abuse not caused by the Manufacturer.
- 7 Damage or failure directly caused by the re-use of existing material. (re-roof)
- 8 Reasonable care and maintenance will be the responsibility of the owner.

**INSPECTION AND REPAIR:** During the term of this Warranty, Manufacturer, its agents or employees, shall have free access to the roof during regular business hours. Upon verbal notice by Owner to Manufacturer within four days of the discovery of any leaks in the roofing system, or need of repair of roof, the Manufacturer shall have ten (10) days to inspect the roof. Following such inspection:

- 1 Manufacturer, at its own expense shall make such repairs as are required by this warranty.
- In case owner or his agent has verbally notified Manufacturer that repairs are required and such repairs are not covered by the Warranty (including repairs required by owner's alteration, extension or addition to the roof) Manufacture, after having obtained Owner's consent thereto, in writing, shall make or cause to be made, such repairs at Owner's expense in accordance with specifications and procedures as established by Manufacturer and this warranty shall thereupon remain in effect for the un-expired portion of its original term. If Owner fails to so consent or if repairs are made by one other than the Manufacturer's authorized designee, this Warranty with respect to such area shall be automatically terminated.
- In the event the (1) Owner notifies Manufacturer and has confirmed the need of repair of roof and (2) Manufacturer is unable to promptly inspect and repair same, and (3) an emergency condition exists which requires prompt repair in order to avoid substantial damage to owner, then owner may make such temporary repairs as may be essential and any such action shall not be a breach of the provision of this Warranty. Owner will bear emergency repair expenses.

**INSPECTION SERVICE:** Manufacturer agrees to re-inspect the completed roof not earlier than 18 nor later than 24 months after completion of the roofing, and if it is determined that there are defects in the roofing, then Manufacturer shall make, or cause to be made at its own expense, such repairs as are necessary to remedy said defects within the scope of its responsibility under the terms of this Warranty.

IN WITNESS WHEREOF, Manufacturer has caused this instrument to be signed and sealed by its duly authorized officer this day of
BY:
TITLE:
CORPORATION:
SEAL:
Project Manager Approval
Division of Facilities Construction and Management
Risk I.D
Risk I.D

## DFCM Roofing History Record Single Ply Roofing

State Building #
DFCM Project #
Facility Name:
Building Name and Address:
Roof Section Description:
Roofing Contractor Name and Address:
Sub-contractors:
Roof System manufacture:
Installation Date:
Warranty Information:  Manufacture:
Contractor:
Roof Area (sq./ft.)
Building Use:
Height above Ground:
Access to Roof Area: Ladder Roof Hatch Stairs
Roof System Information
New Construction: Re-Roof: Old Roof Removed: Yes No
Comments:
Deck Type: Slope:

Insulation:			
Layer #1 Manufactu		Thickness:	Attachment:
Layer #2 Manufactu	ire:	Thickness:	Attachment:
Layer #3 Manufactu	re: 7	Thickness:	Attachment:
Гарег Explain:			
System Type: PVC EP	DM HYPAL	ON CSPE	TPO
Other			
Field Sheet Description: Manufacture	cture B	rand Name	Mils
-			Reinforcement
Comments			
Flashing Sheet: Manufacture	Brand Nar	ne Mils	
	Color_		
Comments			
Separation Sheet: Manufacture	Brand	Name	<u>-</u>
•			
Drainage:			
Internal Roof Drains	Perimeter Gutte	r Internal Gutte	er Scuppers
Primary:	a.	0 4:4	
Manufacture:	Size:	Quantity:	
Overflow:			
Manufacture:	Size:	Quantity:	
Details:			
Walls:			
D.I			
Edge:			
Expansion Joints:			
Walkways:			

f Top Equipmen Mechanical:	t: Unit Types:		Curb Typ	oes:	 Quantit	у
Fans/Vents:	Unit Types:		Curb Typ	pes:	 Quantit	у
Other:	Unit Types:		Curb Typ	oes:	 Quantit	у
1 ½ " Quan 2" Quan 3" Quan	tity: tity: tity: tity:	Flashing Flashing	Type: Type:			
5" Quan 6" Quan Other Quan	tity: tity: tity:	Flashing Flashing Flashing	Type: Type: Type: Type: Type:			